What is Systems Biology?

The Systems Biology Ontology aims to strictly index and define terms used in quantitative biochemistry. The ontology is made up of four orthogonal vocabularies. A controlled vocabulary defines the roles of reaction participants, such as "substrate", "catalyst", etc. A taxonomy orders the quantitative parameters used in biochemistry such as "Michaelis constant", but also "first-order forward rate constant". A precise classification of rate laws defines them, such as "first-order reversible mass action kinetics". Each term contains a precise mathematical expression stored as a MathML lambda function. Finally, a list of simulation frameworks, such as "discrete" or "continuous" precises the validity of a rate-law. The Systems Biology Ontology can be used to increase the semantic content of quantitative models. SBO vocabularies can also be used to annotate results of biochemical experiments in order to facilitate their efficient reuse.

Discuss Systems Biology Terminology

Please go to the Systems Biology Discussion page to leave comments regarding the Systems Biology Terminology.

Examples of comments may include:

- How you are using this terminology
- Why you decided to use (or not use) this terminology
- Strengths or limitations of the terminology
- Comparisons to other similar terminologies

Links

Systems Biology FAQ

Systems Biology Home Page